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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/090,862

03/05/2002

Naoki Oguchi

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26304

7590

10/10/2006

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EXAMINER

LEVITAN, DMITRY

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 10/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/090,862

Applicant(s)

OGUCHI, NAOKI

Examiner

Dmitry Levitan

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-14 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 8, 15-17, 20 and 22 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 7, 18, 19 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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Amendment, filed 05/22/06, has been entered. Claims 1-22 remain pending.

*Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

*Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 22 is rejected under 35 U.S.C. 102(e) as being anticipated by Li (US 6,751,220).

Li teaches an apparatus for transmitting a received packet to a next relaying apparatus in accordance with a policy (one of routers 12, connected to Internet, shown on Fig. 1 and 2, 2:55-3:30) comprising:

a packet receiving unit identifying a transmission source VPN identifier corresponding to a receiving interface from which the received packet has been received (packet processing module 28 on Fig. 2 performing step 400 of Fig. 4, which identifies the VPN identifier of the received packet based on the interface that receives the packet 5:30-44);

a VPN policy executing unit managing relationship between each of transmission source VPN identifiers and transmission destination VPN identifiers (portion of packet processing

module 28 comprising routing VPN conversion process from one VPN index to the new VPN index, steps 400-408 on Fig. 4 and 3:30-3:60); and

a VPN relaying policy executing unit selecting transmission destination VPN identifiers which are allowed to relay a received packet based on said transmission source VPN identifier by the packet receiving unit (inherently part of the operation of packet processing module 28, because the process of VPN conversion, described above, is needed only for the transmission of the packet to new VPN).

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, 6, 8, 15, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu (US 6, 079,020).

6. Regarding claims 1, 8 and 15, Liu substantially teaches the limitations of the claims.

A packet relaying apparatus and method (VPN management station 160 on Fig. 1, 4 and 5, 5:55-6:65) comprising:

first means/network relaying unit for selecting one or more transmission destination virtual private network identifiers which are allowed to relay a received packet based on a transmission source virtual private network identifier related to the received packet (portion of VPN management station 160 selecting a list of all VPN gateways of the VPN network, as

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shown on Fig. 1, utilizing VPN objects, shown on Fig. 6 and 9:28-50, wherein the VPN gateways are potential destinations for the received packet, Fig. 9 and 10:25-40);

second means/domain replaying unit for selecting one or more transmission destination domains corresponding to each of said one or more transmission destination virtual private network identifiers (portion of VPN management station 160 selecting destination domains corresponding to the VPN network, as shown on Fig. 1, utilizing Client object 630 9:50-58);

third means/routing information management unit for collating, using a mask, a next relaying apparatus address of the received packet with each routing information stored in one or more domain relaying means which corresponds to each of the one or more domains to select the next relaying apparatus address (portion of VPN management station 160, used for masking and collating VPN gateways to route VPN packets, as shown on Fig. 9 and 10:40-56, wherein all the domains of the VPN are interconnected with VPN configuration information specifying the destination address conversion for each VPN gateway); and

fourth means/packet relaying unit for transmitting the received packet in accordance with the next relaying apparatus address selected by the third means (Network interface card 408 of VPN management station 160, interconnected with network 100, as shown on Fig. 4 and 8:43-60, inherently operating under the management operation of the masking and collating, because this operation is essential for the proper routing of the packets).

Liu does not teach using domain identifiers.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using domain identifiers to the system of Liu to improve the system operation

with multiple domains, by assigning identifiers to the domains to simplify the domain identification.

In addition, regarding claims 3 and 17, Liu teaches the packets as IP packets including IP addresses (IP addresses 3:39-43).

In addition, regarding claims 6 and 20, Liu inherently teaches using routing filter to set the routing information, because any routing information selection is a filtering operation as it excludes other entries of the routing table.

7. Claims 2 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu in view of Li.

Liu substantially teaches the limitations of claims 2 and 16 (see claim 1, 8 and 15 rejection above).

Liu does not teach identifying a transmission source VPN identifier corresponding to a receiving interface from which the received packet has been received.

Li teaches identifying a transmission source VPN identifier corresponding to a receiving interface from which the received packet has been received (packet processing module 28 on Fig. 2 performing step 400 of Fig. 4, which identifies the VPN identifier of the received packet based on the interface that receives the packet 5:30-44).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add identifying a transmission source VPN identifier corresponding to a receiving interface from which the received packet has been received of Li to the system of Liu to improve the system operation by simplifying the identification of the received packet and improve the

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system security by adding specific interface for the identifying a received packet as the VPN packet.

***Allowable Subject Matter***

8. Claims 9-14 are allowed.
9. Claims 4, 5, 7, 18, 19 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

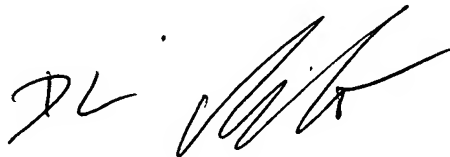
10. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on (571) 272-7529. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to be 'DL' followed by a stylized, cursive signature.

Dmitry Levitan  
Examiner  
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